

ABSTRACT

A semiconductor differential circuit comprising a semiconductor substrate, a first semiconductor device on the semiconductor substrate having a gate electrode for having one of differential signals conveyed thereto and a drain electrode for outputting one of the differential signals controlled by the gate electrode, a second semiconductor device formed on the semiconductor substrate having a gate electrode for having the other of the differential signals conveyed thereto and a drain electrode for outputting the other of the differential signals controlled by the gate electrode, and wherein the drain electrode and drain electrode are placed in the proximity so that, at a predetermined frequency, it is equivalent to the one in which the drain electrode is grounded via a predetermined resistance, and the drain electrode is grounded via the predetermined resistance.